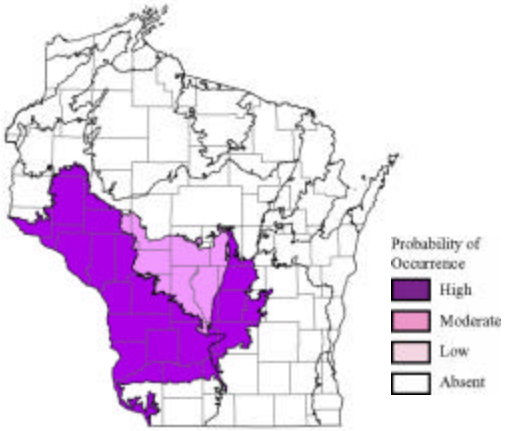
Midland Smooth Softshell Turtle (*Apalone mutica*)

Species Assessment Scores*

State rarity:	3
State threats:	3
State population trend:	3
Global abundance:	4
Global distribution:	4
Global threats:	3
Global population trend:	3
Mean Risk Score:	3.3
Area of importance:	3

* Please see the Description of Vertebrate Species Summaries (Section 3.1.1) for definitions of criteria and scores.



Ecological Landscape Associations
Please note that this is not a range map. Shading does not imply that the species is present throughout the Landscape, but represents the probability that the species occurs somewhere in the Landscape.

Landscape-community Combinations of Highest Ecological Priority

Ecological Landscape	Community
Central Sand Hills	Warmwater rivers
Central Sand Plains	Warmwater rivers
Western Coulee and Ridges	Warmwater rivers

Threats and Issues

- Hydro-electric operations of dams on the Mississippi River are a threat to this species.
- Commercial fishing may be negatively impacting populations through incidental bi-catch in catfish traps and gill and trammel nets.
- Invasive aquatic animals such as zebra mussels and bythotrephes change productivity pathways and cascade throughout aquatic systems, probably reducing food supply and quality for this species.
- Chemical contaminants and siltation are likely affecting this aquatic species which forages in sediments as well as its prey base, but research is needed to learn more about specific impacts to the species.
- Sand bar camping and other recreation may be negatively impacting nesting.
- Excessive motorized and non-motorized recreation may affect foraging and basking behavior to the point of compromising energy budgets in some high use areas.
- Dams on the Mississippi River may limit genetic exchange, especially with populations upstream.
- Dams and dikes, loss of natural river deposition and erosion processes, and hydrologic manipulation all affect nesting habitat availability. These may have both positive and negative impacts and need to be addressed.
- Dredge spoil pile maintenance can negatively impact nesting success, especially when conducted during the period of June 1 through September 15.

Priority Conservation Actions

- Protection of shoreline habitat is needed, which also helps to improve water quality and reduce sediment and contaminant loads.
- Restoring natural stream processes of erosion and deposition may improve nesting success for this species.
- Work with the Army Corps of Engineers to implement policies for dealing with dredge spoil pile maintenance that are consistent with the results of needed research on the impacts of dredge spoil maintenance (off-loading) on turtle nesting. Policy changes should follow the testing of possible solutions to minimize impacts if they are found to be significant.
- Revise commercial fishing regulations, as needed, pending an evaluation of impacts of current levels of bi-catch of this species.
- Research is needed to evaluate nesting success on islands, banks and dredge spoil piles in the Mississippi River.
- Long term monitoring is needed to evaluate population status and track trends of representative populations.
- Better coordination between fisheries and wildlife agencies would improve smooth softshell monitoring, research and management.